

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method comprising:
interconnecting at least two aggregation devices by an Inter Switch Trunk (IST) link to
logically operate as a single device, the at least two aggregation devices operating concurrently;
exchanging messages between the at least two aggregation devices to ensure that each of
the at least two aggregation devices is routed split multilink trunking (RSMLT) enabled; and
synchronizing forwarding records of local routing instances for Internet Protocol (IP)
networking between the at least two aggregation devices, the forwarding records are media
access control (MAC) records, each of the MAC records includes an indication that, when set to
a first logic level, allows routing of that MAC record over a port different than ports through
which the forwarding records are exchanged between the at least two aggregation devices over
the IST link and, when the indication bit is set to a second logic level, does not allow routing of
that MAC record over the IST link.

2. (Previously Presented) The method of claim 1 further comprising:
providing sub-second failover if one of the at least two aggregation devices fail and the at
least two aggregation devices are operating as part of a Layer 3 (L3) network.

3. (Cancelled).

4. (Cancelled).

5. (Previously Presented) The method of claim 1, wherein the synchronizing of the
MAC records includes exchanging local MAC addresses supported by a first aggregation device
of the at least two aggregation devices with a second aggregation device of the at least two
aggregation devices.

6. (Original) The method of claim 5, wherein each of the MAC records further comprise a routing bit that, when set, enables local routing instances of the first aggregation device to process packets having MAC addresses associated with the MAC records.

7. (Original) The method of claim 2 further comprising:
handling all packets received from and transferred to a communication device by a first aggregation device of the at least two aggregation devices when a second aggregation device of the at least two aggregation devices is down.

8. (Original) The method of claim 2 further comprising:
handling all information received from and transferred to a communication device by a first aggregation device of the at least two aggregation devices when a link interconnecting the communication device and a second aggregation device of the at least two aggregation devices is down.

9. (Currently Amended) A system comprising:
an Inter Switch Trunk (IST) link;
a first aggregation device coupled to the IST link, the first aggregation device comprises a first set of ports, first processing logic coupled to the first set of ports, and a first memory element coupled to the first processing logic, the first memory element including a routing table that comprises a first set of media access control (MAC) records, each MAC record of the first set of MAC records includes a routing bit that, when set to a first logical value, allows routing of that MAC record from the first set of ports over the IST link and when set to a second logical value, does not allow routing of that MAC record over the IST link; and
a second aggregation device coupled to the IST link, the second aggregation device to obtain the first set of MAC records for use by one or more local routing instances for a Layer 3 (L3) networking protocol within the second aggregation device.

10. (Original) The system of claim 9, wherein the second aggregation device comprises a second set of ports, second processing logic coupled to the second set of ports, and a

second memory element coupled to the second processing logic, the second memory element including a table that comprises a second set of MAC records.

11. (Original) The system of claim 10, wherein the first aggregation device to obtain the second set of MAC records from the second aggregation device for use by one or more local routing instances within the first aggregation device.

12. (Original) The system of claim 9, wherein both the first aggregation device and the second aggregation device are switches.

13. (Original) The system of claim 9, wherein the first aggregation device informs the second aggregation device that it is routed split multilink trunking (RSMLT) enabled by issuing a first message to begin synchronization of the first and second sets of MAC records contained by the first and second aggregation devices.

14. (Previously Presented) The system of claim 13, wherein the first aggregation device sends a second message after the first message to begin synchronization of the MAC records, the second message comprises an IP address of IP routing instances of the first aggregation device, MAC addresses of the IP routing instances, and virtual local area network (VLAN) identifiers of a VLAN on which the IP routing instances participate.

15. (Original) The system of claim 13, wherein the first aggregation device sends a second message after the first message to begin synchronization of the MAC records, the message comprises an IPX network address of IPX routing instances of the first aggregation device, MAC addresses of the IPX routing instances, and virtual local area network (VLAN) identifiers of a VLAN on which the IPX routing instances participate.

16. (Original) The system of claim 14, wherein the second aggregation device comprises a hold-down timer that, upon receipt of the first and second messages, the hold-down timer is activated.

17. (Previously Presented) The system of claim 16, wherein after expiration of the hold-down timer of the second aggregation device, the first set of MAC records associated with local routing instances supported by the first aggregation device are programmed by the second aggregation device.

18. (Original) The system of claim 17, wherein the second aggregation device further comprises a hold-up timer that is activated once a routing problem is detected, at least some data traffic previously forwarded by the first aggregation device is then forwarded by the second aggregation device until the hold-up timer expires.

19. (Previously Presented) An aggregation device in communication with an IST peer device, comprising:

a control plane; and

a data plane in communication with the control plane, the data plane to provide sub-second failover recovery and provide control plane protocols enough time to converge without adversely affecting data forwarding operations through synchronization of media access control (MAC) records of local routing instances for Internet Protocol (IP) networking with the IST peer device.

20. (Cancelled).

21. (Cancelled).